



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor
Ted Stewart
Executive Director
James W. Carter
Division Director

1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801
801-538-5340
801-359-3940 (Fax)
801-538-7223 (TDD)

February 18, 1997

TO: Minerals File

FROM: Anthony A. Gallegos, Reclamation Engineer *aa*

RE: Site Inspection, 5-M Inc., Silver Reef Mine, M/053/002, Washington County, Utah

Date of Inspection: January 28, 1997
Time of Inspection: 0830 - 1150
Conditions: Overcast, cool
Participants: Mark Mesch, Chris Rohrer, AMR; Larry Gore, BLM; Wayne Hedberg, Tony Gallegos, DOGM

Purpose of Inspection: to evaluate current reclamation work at the site and consider additional reclamation tasks to include in a change order

The inspection began with an overview of the site from the AS&R shaft location. Chris Rohrer provided a description of the 5-M reclamation work completed thus far and the work currently under way. During this inspection, workers were cutting up the metal tanks in the process area and loading them into a truck. The majority of tanks and equipment previously located in the process area at the south end of the site had been removed.

We walked the majority of the site from the ore piles near the trommel at the north end to the scrap metal near the process area at the south end. We examined the various features at the mine site to consider additional reclamation work to be added to the work being done under the 5-M bond forfeiture. We did not examine the warehouse area.

At the north end of the site, other reclamation tasks which could be added would include: ripping and burial of the asphalt pad at the trommel/agglomerator area, regrading the ore piles, removal of power poles and power lines accessing this part of the site, and the possibility of needing to construct a drainage channel after the pachuca tanks are removed. The asphalt pad at the trommel area is believed to extend under the ore piles presently located north of the trommel. The pad is believed to be four inches thick based on the other asphalt pad already ripped up. The asphalt could be buried in the excavation left by removal of the pachuca tanks or buried to the west near the foot of the slope. The ore piles could be used to cover the buried asphalt or used in the general regrading of the slope. Removal of the power poles and lines would be a fairly easy task if the lines are not energized and if permission to remove them is easily obtained. We examined the natural drainage path near the partially ripped agglomeration pad. A swale could be needed to channel runoff across the road into the natural drainage.

Page 2
Site Inspection Memo
M/053/002
February 18, 1997

At the north end of the leach pad. The surface drainage at the northwest corner of the heap is currently running over the edge of the asphalt and eroding a portion of the slope draining onto the heap. Surface runoff could be diverted to the agglomerator pad area by removing a small portion of the asphalt and digging a diversion ditch. This diversion would reduce the amount of surface runoff onto the capped leach pad. This diversion ditch would probably need to include rip-rap in a short section due to the steepness.

During this inspection water was ponded at the northeast end of the leach pad. The ponding appears to be caused by a low spot in the surface grading. The water impounds until the depth is sufficient to run over the crest of the diversion ditch along the eastern perimeter.

While at the processing area Larry Gore, of the BLM, arrived on site. Additional reclamation work in the processing area would include ripping up the asphalt pad, breaking up the concrete footers, and burying these materials. It would be possible to bury the asphalt and concrete debris in a trench excavated at the base of the small bench located along the west perimeter. Since this portion of the site is on BLM lands, Larry will need to check with the District Manager to see if onsite burial of these is acceptable. The asphalt pads at the northern end of the site are also on BLM lands and, therefore, approval will be needed for burial at that location also. If on site burial is not acceptable, the contractor will have to haul the debris to a burial location on the private portion of the site or haul the materials to an off site landfill. Either option will will increase costs.

We discussed removal of the power lines throughout the site. While the actual work for taking these lines down is minimal, the red tape associated with getting the proper clearance may be time consuming. Ownership of the lines is uncertain and would take some research. It is also unknown which lines are energized and which lines provide service for areas outside of the mine.

Photographs were taken of various portions of the site with emphasis on the areas which could be affected by adding new reclamation tasks into a change order.

jb
cc: Larry Gore, BLM
m53-02ag.ins